NE

marked-up pages. A clean copy of the amended claims is also enclosed.

REMARKS

The above amendments were made to place the application into proper United States Patent Format.

Respectfully Submitted,

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Marked-up copy of amended page 4 of the specification

The nucleotide sequence of the expression cassette contains transcriptionally regulatory areas, guaranteeing a strong specific expression of an arbitrary gene into the seed of plants. The Northern blot (Fig. 2a) shows the high seed-specific expression in the various tissues of Vicia faba. The GUS data in Figs. 2b and 2c show on the one hand the distribution of the β-glucuronidase in the sections through ripe tobacco seeds and, on the other, the accumulation of the β-glucuronidase in the transgenic tobacco seeds as a function of development.

Amended Claims - marked-up Copy

1. (amended) ~~Promoter~~ A promoter for expression of arbitrary genes in plant seeds~~, wherein there exists the sequence of Fig. 1a, which thus becomes the object of the claim~~.

2. (amended) ~~Promoter~~ The promoter according to claim 1, wherein it mediates the expression in the cotyledons and in the endosperm of seeds as a function of development.

3. (amended) ~~Expression~~ An expression cassette for expression of arbitrary genes in the plant seed, ~~containing~~comprising:
   - a promoter according to claim 1 ~~or 2~~,
   - a gene ~~to be~~ capable of being expressed
   - 3' termination sequences.

4. (amended) ~~Expression~~ The expression cassette according to claim 3, ~~wherein it additionally contains the~~ further comprising a DNA sequence of a signal peptide~~, preferably the SBP signal peptide~~.

5. (amended) ~~Expression~~ The expression cassette according to claim 3, ~~wherein~~ further comprising a ~~further~~ second DNA sequence ~~is~~ downstream to ~~the~~ a DNA region provided with a transcriptionally regulatory sequence for a ~~strong~~ seed-specific gene expression, the ~~latter~~ DNA region containing ~~the~~ information for the formation and quantitative distribution of endogenous products or ~~the~~ expression of heterologous products in culture crops.

6. (amended) ~~Expression~~ The expression cassette according to ~~claims 3 to 5~~claim 3, wherein arbitrary foreign genes are

integrated either as transcription or as translation fusions.

7. (amended) ~~Expression~~ The expression cassette according to ~~claims 3 to 6~~claim 4, wherein the signal peptide ~~of the~~ is coded by a SBP seed protein gene ~~is used as a signal peptide~~.

8. (amended) Expression cassette according to ~~claims 3 to 7~~, wherein the gene ~~of the~~ is capable of coding for a sucrose binding protein like gene ~~is used as the gene to be expressed~~.

9. (amended) ~~Expression~~ The expression cassette according to ~~claims 3 to 8~~claim 3, wherein it is also used for co- and multiple transformations.

10. (amended) Plasmids containing an expression cassette ~~according to claims 3 to 8~~ for expression of arbitrary genes in the plant seed, comprising
- a promoter according to claim 1
- a gene capable of being expressed
- 3' termination sequences.

11. (amended) ~~Plasmid pSBPROCS~~ The plasmid according to claim 10, wherein the plasmid is pSBPROCS comprising a DNA sequence about 5.3 kB in size, ~~in which~~ the DNA sequence comprising a SalI promoter fragment of the regulatory starter area about 1.9 kb in size including the signal peptide and 5 triplets of ~~the~~ a SBP-homologous gene of Vicia faba, restriction sites for cloning of foreign genes and ~~the~~ a transcription terminator of the octopine synthase gene ~~are contained~~.

12. (amended) ~~Plasmid pPTVSBPRGUS~~ The plasmid according to claim 10, wherein the plasmid is pPTVSBPRGUS comprising a DNA sequence about 14.9 kb in size, ~~in which~~ comprising a phosphinothricin resistance gene about 1 kb in size, a SalI/NcoI promoter fragment of the regulatory starter area of the SBP-like gene of Vicia faba about 1.8 kb in size, the coding region of the ß-glucuronidase about 2 kb in size and the transcription terminator of the octopine synthase gene ~~are contained~~.

13. (amended) Method for ~~the~~ an insertion of an expression cassette ~~according to claims 3 to 9~~ for expression of arbitrary genes in the plant seed, comprising a promoter according to claim 1, a gene capable of being expressed and 3' termination sequences with a DNA sequence for ~~strong~~ seed-specific gene expression into a plant cell, comprising the following steps:

a) ~~isolation of~~ isolating a clone VfSBP20, wherein the gene coding for the SBP seed protein occurring in the plant seed is selected from a cDNA Bank of cotyledons of Vicia faba,

b) ~~isolation of~~ isolating a clone pSBPR15, wherein ~~the~~ a DNA sequence contained therein comprises the regulatory starter region of the SBP seed protein gene of Vicia faba and a sequence from a related legume hybridising with the DNA sequence of ~~the~~ SBPR15,

c) ~~production of the~~ producing a plasmid pSBPOCS ~~making use of~~ by isolating and closing the SalI fragment of plasmid pSBPR15 1.9 kb in size,

d) ~~integration of~~ integrating foreign genes into the pSBPOCS expression cassette,

e) cloning of the expression cassette containing a DNA sequence for over-expression of foreign genes in plant seeds into binary vectors

f) ~~transfer of~~ transfering the expression cassette containing ~~an~~ the foreign gene under the control of the promoter ~~according to claims 1 or 2 into a plant cell~~ for expression of arbitrary genes in plant seeds.

~~14. Use of an expression cassette according to claims 3 to 9 for expression of homologous and heterologous genes in the seeds of transformed plants.~~

~~15. Use of an expression cassette according to claims 3 to 9 for expression of genes changing the storage capacity or the germination capability of seeds.~~

~~16. Use of the plasmids pBISBPR7, pBISBPR15, pSBPGUS, pPTVSBPRGUS and pSBPOCS or derivatives thereof for transformation of culture crops.~~

~~17. Use of the plasmids pBISBPR7, pBISBPR15, pSBPGUS, pPTVSBPRGUS and pSBPOCS or derivatives thereof for regulation of endogenous processes or for production of heterogenous products in culture crops.~~

~~18. Use of an expression cassette according to claims 3 to 9, wherein the transformed plants expressing new gene products or such altered in the seeds are selected, genetically stable lines are bred and the gene products are extracted from the seeds of the transgenic plants.~~

19 (amended) Plant cell containing a plasmid ~~according to claims 10 to 12~~ containing an expression cassette for expression of arbitrary genes in the plant seed, comprising a promoter according to claim 1, a gene capable of being expressed and 3' termination sequences.

~~20.~~ (amended) ~~Plant cell produced according to the~~ The method of claim 13, wherein a plant cell is produced.

21. (amended) Plant or plant tissues regenerated from a plant cell ~~according to claims 14 or 15~~ based on an expression cassette for expression of homologous and heterologous genes in the seeds of transformed plants, comprising a promoter according to claim 1, a gene capable of being expressed, and 3' termination sequences.

~~22.~~ (amended) Plant according to claim ~~14~~21, wherein it is a culture crop.

~~23.Use of the DNA sequence of the SBP signal peptide in an expression cassette for expression of arbitrary genes in plant seed.~~

24. (New) The expression cassette according to claim 4, further comprising a DNA sequence of a SBP signal peptide.